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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10,043,193	01/14/2002	Masahiro Seiki	218106US2S	6175

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EXAMINER

CHOWDHURY, TARIFUR RASHID

ART UNIT PAPER NUMBER

2871

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,193

Applicant(s)

SEIKI ET AL.

Examiner

Tarifur R Chowdhury

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities:

In page 14, line 6, "115" should be changed to -115b--.

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 9 and 14, applicant claims a first common electrode and a second common electrode. However, in light of the specification, it is not clear as to whether applicant means one common electrode having two separate regions or two separate common electrode. For examination purposes it is assumed that there is one common electrode with two regions.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

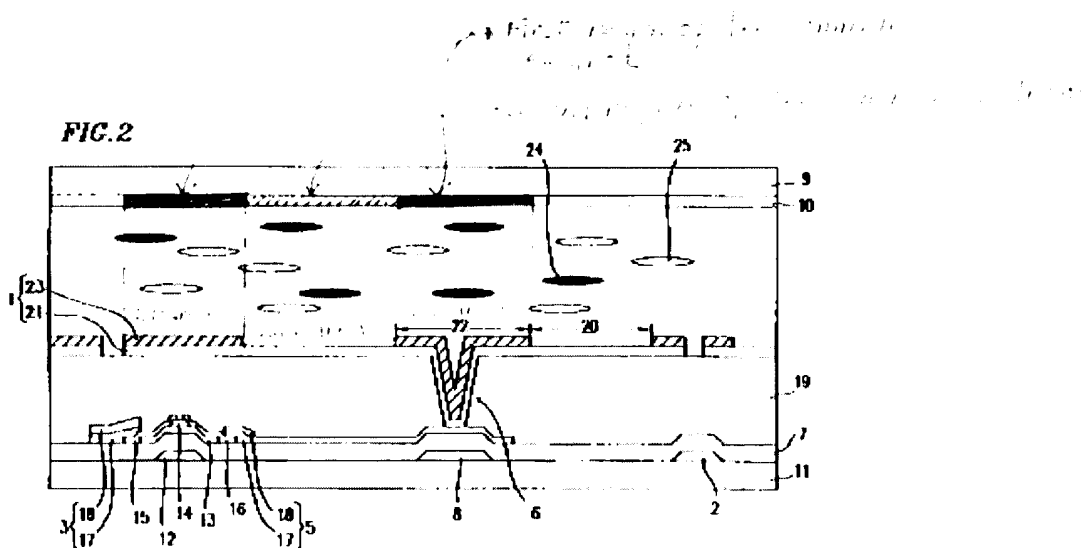
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 2, 5-8 and 14-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kubo et al., (Kubo), USPAT 6,195,140.**

8. Kubo discloses and shows in Fig. 2, a liquid crystal display comprising:

- first and second substrates (11 and 9) facing each other;
- first pixel electrodes (23) arrayed on a first area within a surface of the first substrate (11) facing the second substrate (9);



- second pixel electrodes (21) arrayed on a second area within the surface of the first substrate (11) facing the second substrate, the second area being different than the first area;

- a common electrode (10) having a first region (applicant's first common electrode) supported by the second substrate (9) and facing the first pixel electrodes (23);

- a common electrode (10) having a second region (applicant's second common electrode) supported by the second substrate (9) and facing the second pixel electrodes (21); and

- a liquid crystal layer interposed between the first pixel electrodes and the first common electrode and between the second pixel electrodes and the second common electrode, wherein a first display region corresponding to the first area displays an image by light reflection, and a second display region corresponding to the second area can display an image by light transmission mode (col. 10, lines 25-34).

Kubo also discloses in col. 4, lines 1-4 that both the first pixel electrode and the second pixel electrode are made of transparent conductive film with a reflection film interposed between the pixel electrode and the substrate.

Accordingly, claims 1, 2, 5, 14-16 are anticipated.

As to claim 6, it is clear from Fig. 2 of Kubo that the first region and the second region of the common electrode are electrically connected.

As to claims 7, 8, 17 and 18, Kubo also discloses that the display can effectively use light which has been emitted from a backlight and passed through the transmission electrode region (20) when ambient light is low and light reflected by the reflection electrode region (22) when the ambient light is high. Also both the transmission electrode region and the reflection electrode region can be used to generate a display (col. 10, lines 25-34).

Allowable Subject Matter

9. Claims 9-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

10. Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

The prior arts of record do not anticipate or render obvious to one skilled in the art a liquid crystal display comprising various elements as claimed, more specifically each of the first pixel electrode and the second pixel electrode being formed of a light reflective film wherein the second reflecting film includes at least one opening.

It is known for a transfective display to have pixel electrodes with a transmissive region and a reflective region by having one reflecting electrode and one transmissive electrode. Similarly having two transmissive electrode with a reflector between the electrode and the substrate also provides transfective display. Further, a reflective

electrode having opening to provide transfective mode is also known in the art.

However, both the pixel electrode being made of reflective material with only one of the pixel electrode being provided with an opening in a transfective display, including all other recitations of the base claim is considered novel.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) US 2001/0004276 is related to a display having an area that is capable of displaying an image by using light reflection mode and another area capable of displaying an image by using light transmission mode.

b) US 2001/0024257, US 2002/0027627, US 2002/0109811, US 2002/0171792 and US 2002/0036732 are related to a transfective liquid crystal display.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (703) 308-4115. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L Sikes can be reached on (703) 305-4842. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7005 for regular communications and (703) 308-7724 for After Final communications.

• Application/Control Number: 10/043,193
Art Unit: 2871

Page 7

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.



T. Chowdhury
Primary Examiner
Technology Center 2800

TRC
May 28, 2003